

Title (en)

LASER WELDING DEVICE, LASER PROCESSING DEVICE, LASER WELDING METHOD, BEARING MANUFACTURING METHOD, MACHINE MANUFACTURING METHOD, VEHICLE MANUFACTURING METHOD, BEARING, MACHINE, AND VEHICLE

Title (de)

LASERSCHWEISSVORRICHTUNG, LASERBEARBEITUNGSVORRICHTUNG, LASERSCHWEISSVERFAHREN, LAGERHERSTELLUNGSVERFAHREN, MASCHINENHERSTELLUNGSVERFAHREN, FAHRZEUGHERSTELLUNGSVERFAHREN, LAGER, MASCHINE UND FAHRZEUG

Title (fr)

DISPOSITIF DE SOUDAGE AU LASER, DISPOSITIF DE TRAITEMENT AU LASER, PROCÉDÉ DE SOUDAGE AU LASER, PROCÉDÉ DE FABRICATION DE PALIER, PROCÉDÉ DE FABRICATION DE MACHINE, PROCÉDÉ DE FABRICATION DE VÉHICULE, PALIER, MACHINE ET VÉHICULE

Publication

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Application

EP 17904109 A 20171221

Priority

- JP 2017071614 A 20170331
- JP 2017045914 W 20171221

Abstract (en)

[origin: EP3575030A1] A laser welding apparatus (1) includes a laser welding head (5) configured to irradiate a workpiece (10) with laser light, a welding filler feeding mechanism (6) configured to supply a welding material to a position on which laser welding is performed, and a hollow structural moving mechanism (100) configured to move a welding unit (50) including the laser welding head and the welding filler feeding mechanism. The hollow structural moving mechanism has an insertion portion (3a) through which wire materials (41 and 62) of the laser welding head and the welding filler feeding mechanism are inserted.

IPC 8 full level

B23K 26/08 (2014.01); **B23K 26/064** (2014.01); **B23K 26/211** (2014.01); **B23K 26/28** (2014.01); **B23K 26/70** (2014.01); **B23K 37/02** (2006.01); **F16C 33/46** (2006.01)

CPC (source: EP US)

B23K 26/064 (2013.01 - US); **B23K 26/0884** (2013.01 - EP); **B23K 26/211** (2015.10 - US); **B23K 26/28** (2013.01 - EP); **B23K 26/702** (2015.10 - EP); **B23K 37/0241** (2013.01 - EP); **F16C 33/46** (2013.01 - EP); **B23K 26/08** (2013.01 - US); **B23K 26/14** (2013.01 - US); **F16C 33/46** (2013.01 - US)

Citation (search report)

- [Y] JP H09108869 A 19970428 - AMADA CO LTD
- [Y] JP 2012024777 A 20120209 - AMADA CO LTD
- [Y] JP H07164171 A 19950627 - TOSHIBA CORP
- [Y] EP 2965878 A1 20160113 - YASKAWA DENKI SEISAKUSHO KK [JP]
- See also references of WO 2018179632A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3575030 A1 20191204; **EP 3575030 A4 20200226**; **EP 3575030 B1 20240103**; JP 2018171657 A 20181108; JP 2022118112 A 20220812; JP 7091864 B2 20220628; JP 7484965 B2 20240516; WO 2018179632 A1 20181004

DOCDB simple family (application)

EP 17904109 A 20171221; JP 2017045914 W 20171221; JP 2018115672 A 20180619; JP 2022096538 A 20220615